

HARDCOPY

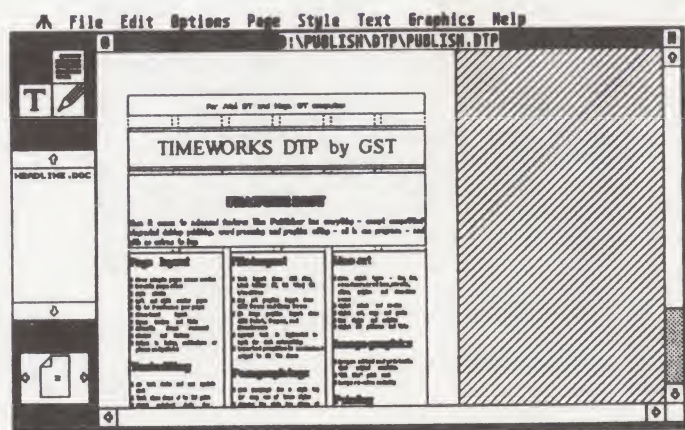
An ABE's ACEs Publication

June 1988

New Release.....

Timeworks Desktop Publisher ST

- ☆ Paragraph Tagging
- ☆ Automatic Bulleting
- ☆ Text Wrap Around Graphics
- ☆ Import Formatted Text from:
 - 1st Word
 - 1st Word Plus
 - Word Writer ST
 - Word Perfect
- ☆ Import Graphics from:
 - Easy Draw
 - Neochrome
 - Degas



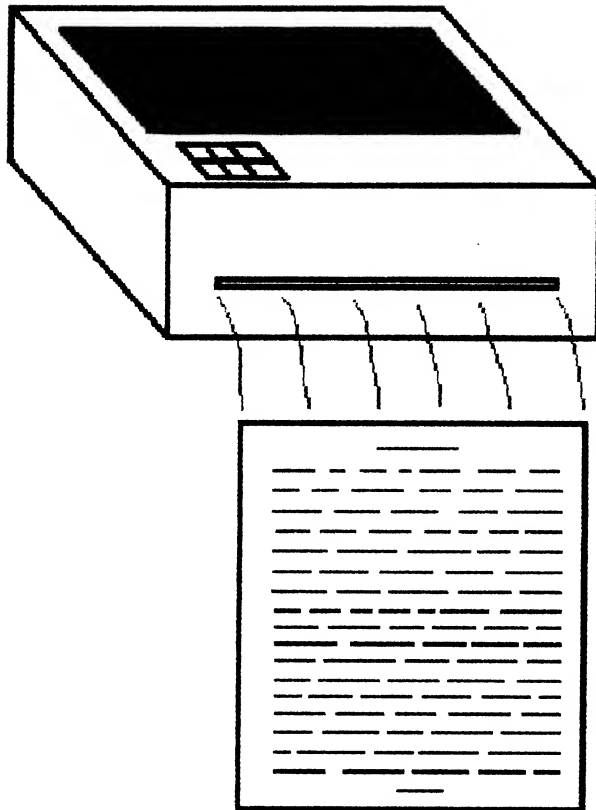
Review Inside

Election Note:

This year we have a brand new E-Board. Lets give them the help and encouragement they deserve. Together we can help to keep ABE's ACEs the strong, independent, organization it has always been.

Your contribution of time and effort to the club will only help to return a more solid, interesting club for your own enjoyment.

Remember, outside clubs are constantly tapping our resources. We all have an investment in this club. Let's all pitch in to keep it together.



Editorials

I would just like to thank everyone for HONESTLY replying to the survey on the BBS. It was appreciated and helped us put the newsletter together. Second, I would like to wish all of the people running for the E-board good luck. I was very impressed with everyone running for the E-board. I hope the club can continue in this way, because it's great. Well, rushing to get this newsletter out, so, I will let Tony do all of the bs'in! See you next newsletter and enjoy!

Joe Souder

Newsletter Survey Results

First of all, in case you haven't noticed the difference, starting with the last issue the newsletter has been printed with J&S's laser printer. Unfortunately in the last issue pages 12-15 somehow missed the laser printer and were done with a dot-matrix. Anyway we hope you enjoy the new look. Between March 26, and April 9, 1988 we ran a survey on the club's bbs. Thirty-nine people replied, which is about a third of the total membership of the club. The following are the questions along with the results we got.

What computer do you use?

In response to this question 46% owned an 8-bit only, while 33% only have an ST, the other 21% owned both computers. This means there are more 8-bit owners than ST owners, but the newsletter submissions seem to suggest the opposite.

What do you primarily use your computer for?

For this category the two top choices were telecommunications and business at 18% each, but since this survey was taken on a BBS, more people would select telecommunications than if the survey was taken by everybody. So Business is probably more popular overall. Word Processing and Entertainment were the next most popular choices at 15% each, followed by programming with 10%. The rest of the votes were divided among several other choices that were given. At this point in the survey, the survey takers were given a list of different types of articles and asked to reply whether they wanted to see more of that type, less of it, same amount, or none at all. We found a few of the replies surprising. The first category was reviews, 54% wanted to see more while 44% wanted the same amount. Next up was Tutorials, a strong majority (74%) wanted to

see more, 8% wanted less and 16% wanted the same. If I continue as newsletter editor, I will see that the need here is fulfilled (it won't hurt to have a knowledgeable club member submit tutorials). Following this we had Specialized Columns, these are the columns like "Sound Programming" and "Hints, Tricks, and Tips". 46% wanted more and 41% wanted the same. For Editorials/Opinions, 46% said they want to see more, 33% said Same and 21% said less. Next came reprints from other newsletters. It suprised us that 51% called for more. We expected people to want to see original material. Is this a clever scheme to avoid writing articles? Anyway, 39% called for the same amount and 8% wanted less. After that we had News. Here we expected people to want to see more, and they did with 77%. We agree that there should be more news. The problem is that most of our information would come from other newsletters which are usually one to two months old when we get them, or magazines where the information is at least three months old. Add to this the time from when we put the info in the newsletter to the time it is distribute it and we're talking an extra one or two months. Which means that when you get to see it, it's old news. We will try to fix this problem by putting the most up to date news in at the last minute which will mean the news will only be a few weeks old. Next up was feature articles where 56% called for more and 39% elected for the same. We have included a feature article on printers in this issue, we hope you like it. The last category we had was Light/Humorous articles. This was the only category where a majority didn't call for more, the most popular choice was the same at 44%. 41% wanted more, and 10% wanted less. After that part we asked if we added a new column to the newsletter, what should it cover. The most popular

choice was programming with 36%, followed by a beginners column at 23%. In third came Opinions at 15% and then telecommunications and news at 10% each. We then asked if the survey taker if they were interested in writing a column on a topic of their choice. 44% said they would (Ok so where are they??). The next question asked the taker if they're willing to write Letters for a Letters column. An overwhelming 85% said yes. If only we could actually get that kind of response in actual letters. The last question asked the survey taker to rate the last newsletter (in this case the Feburary one). 62% said it was good, 23% even said it was excellent. 13% said it was fair, and one person said it was poor. We were glad to see that no one selected the last option which was "Better suited to wrap a dead rat in." We'd like to thank everyone who took part in this survey, and everyone who submitted articles or other material. If this becomes our last newsletter, I'd like to thank everyone and especially the E-board for the support I had. I'd also like to say that I enjoyed working on the newsletter and would like to return to doing it if I get the chance.

Tony Smolar

New Hotline!

**The new hotline number is
799-2228
by the time you read this.**

filename. The program then imports the text into the selected frame and places the filename into the stories library window. By double clicking on the filename in the library window the program will display size of the file, number of frames it now takes up, and amount of text left to place. To continue text placement into a second frame. Simply select another frame and click once on the filename in the library.

Now for the graphics. TDP imports Degas - PT7, Neochrome - NEO, GEM Paint - IMG, Easy Draw - GEM, and GEM Draw - GEM. The latter two are handled as line art instead of bit mapped images. So they can be sized or stretched without any noticeable loss of picture quality.

Once the picture has been imported its filename shows in either the line art or the image library depending on type. Pictures can be cropped, edited, or scaled. The scaling function can retain the pictures' aspect ratio as well as whole pixel scaling in horizontal, vertical, or both. This last function eliminates those annoying "patterns" that appear on some other programs.

Now that we've sized the picture we have to position it. This is really easy because TDP automatically wraps the text around the graphic frames. Every time you move the picture the text will flow around it. This eliminates the need for multiple text columns to insert a graphic. Just put it where you want it and let the program do the work.

Now it's time for the clean up. This is very easy because each paragraph is tagged. The tags contain the information for font, spacing, tabs, indents, margins, and justification. The tag files can be easily modified or new ones created. Changing information in a tag file changes all paragraphs using that tag through the document. The assigned tags can also be easily changed and

the most used can be assigned to function keys. This makes formatting even faster.

After proof reading you'll find the search & replace a big help for last minute touch-ups.

Now for Printing. This is the area that I have the most problem with. Not because it's hard to use. But because of GDOS the files aren't transportable between printers. The problem is that different printers are allowed different sized fonts. Not always in the same point sizes. So a document created and laid out on my system (like this one) won't look the same when printed on a system with a different printer installed.

A list is provided listing all fonts available for any type of installation. So if you restrict yourself to fonts available on another system (lets say a friend's laser printer) then the document should printout OK. But the problem still exists that you have to lay out a document for a particular printer.

Now with that said its time for my second gripe. I have a couple of printers including a NEC P2200 which can print both 180x180 dpi or 360x360 dpi. The gripe is that I can't switch resolutions on the same printer without reinstalling the whole program! I think that a lot of the problem lies with GDOS and font scaling. But I consider this a major problem, but again, it doesn't make the program unusable. Read on.

Now that I have that off my chest I can say that the dot matrix printout is very good. It's also fast. It times out to about six minutes a page on an Epson FX 9 pin printer. An HP Laserjet takes about 12 minutes per page and the printout quality is excellent.

(Bit mapped graphics also look good with a lower resolution printer.)

Notes

The article that you are reading has been prepared using both Word Writer ST and the Timeworks Desktop Publisher. It has been printed on a NEC P2200 Pinwriter at 360x360 dpi. I am using the automatic left, right page offset which allows for binding. (Yes the wider center margin was intentional)

As you can see throughout the text the automatic hyphenation works very well.

The program has many more features than were presented here, due to space limitations.

Below are samples of the included fonts.

Comment

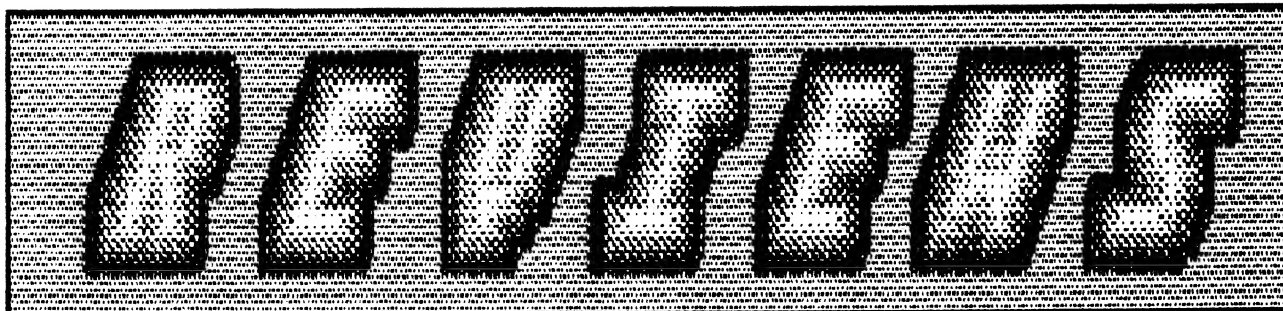
I was very impressed with the overall ease of use and flexibility.

The paragraph tagging and text around graphics make it a must buy for any newsletter.

Timeworks, Inc.
444 Lake Cook Road
Deerfield, IL 60015
(312) 948-9202

Dutch
Swiss
Rockface
DRURY LANE
Ravalia
Madison

● ○ ■ □ ◆ • ✕ ✖ ✗ ✙ ✚ ✛ ✜ ✝ ✞ ✟ ✠ ✡ ✢ ✣ ✤ ✥ ✦ ✧ ✨ ✩ ✪ ✫ ✬ ✭ ✮ ✯ ✰ ✱ ✲ ✳ ✴ ✵ ✶ ✷ ✸ ✹ ✺ ✻ ✼ ✽ ✾ ✿ ✠ ✡ ✢ ✣ ✤ ✥ ✦ ✧ ✨ ✩ ✪ ✫ ✬ ✭ ✮ ✯ ✰ ✱ ✲ ✳ ✴ ✵ ✶ ✷ ✸ ✹ ✺ ✻ ✼ ✽ ✾ ✿



Cyber Studio

(CAD-3D 2.02 + Cybermate)

Atari ST

Reviewed by Dante Stella

Reprinted from Michigan Atari Magazine.

March 1988

Recently, I purchased CAD-3D (v 2.02) from ANTIC software with the intent of easily creating animations. Although it wasn't as easy as I expected, CAD-3D is still a powerful package for your design needs. The documentation for the package is clear and well written, although the documentation for the included animation editor is 80+ pages, and you must print it out. A nice three-ring binder is included, so it looks tidy on a shelf! On the whole, the object editing portion of the program is well-written and easy to use, although it may be somewhat slow when dealing with complex objects. Four views may be used at once, with optional full screen options. Objects may be seen in wire frame, hidden line, soft edge, and/or colored frame modes. Primitives and powerful spin (lathe) and extrude tools make creating complex objects easy but sometimes slow. A full range of rotation and camera controls is given. Animation with this program is created with CAD-3D and edited/modified by the Cybermate program included in the package. In the final mode, it can take

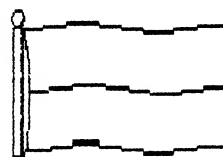
from 10 seconds to 1 minute to create a frame of animation, but in some cases draft mode gives comparable quality at ten times the speed. Still frames may be created in DEGAS or NeoChrome formats. All in all, this is a good package for you if you are interested in animation, design, graphics or the like. If you can live with the \$90 price, it may be what you were looking for in a graphics package.

Cyber Studio

The Catalog

544 Second Street

San Francisco, CA 94107



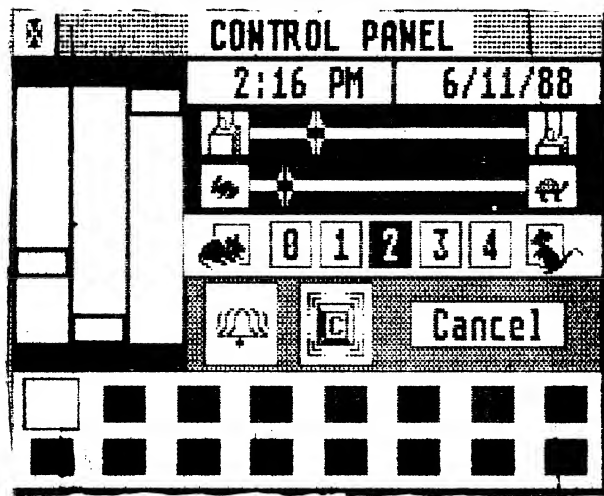
Lords of Conquest

Atari 8-bit

Reviewed by Tony Smolar

Several years ago a company named Electronic Arts was formed by a man named Trip Hawkins. This company began producing software exclusively for the Atari 8-bits, but later expanded to include Apple and

REVIEWS



The Clock Setter

An ST review and program by Chris Scullion

New versions of software are always nice to have. Most bugs you've noticed in the past are eliminated in the newer version and a few surprise features are often added, making you wonder how you ever got along with the older version. Usually we see new versions of word processors, compilers, and the like. In this case, I'd like to talk about something a little more mundane -- the Atari control panel desk accessory. First, let's see what they've done to improve it. They've combined the install printer and RS232 configuration accessories with the old control panel to take up fewer accessory slots. That's good since there is a limit of six accessories. Since most people use both of these features, printers and modems, the change makes a lot of sense. The RS232 option has been enhanced to allow baud rates all the way up to 19,200 baud. The old version had a maximum of 9600 baud. These improvements are well worth the download time. This new version is not without its problems, however. In creating this version, a bug has been introduced into the clock part of the accessory. Some may argue that it

is not a bug, but I think it is. Once the time and date were set with the old version, you could forget about it. Re-entering was only required at power-up time -- the date and time survived the system reset. This is no longer the case with the new version. The reason is that it fails to read the keyboard clock when it starts up. The keyboard clock is not effected by the system reset as the DOS clock is. Since it is a simple matter of loading the DOS clock with the contents of the keyboard clock at system reset time, a solution is possible. Below is a simple program written in Personal Pascal which does just that. Installed in the AUTO folder, this program simply reads the keyboard clock using the XBIOS function 23. Then it checks the day to see if it is valid. If not, it replaces the date and time with default values (11/20/85 12:00 AM). In any case, it then puts the date and time into the DOS clock using the GEMDOS functions 2B and 2D. Simple. If it is compiled with all checking and debugging options turned off, the program takes up only about four hundred bytes. I must explain about the rather cryptic coding method used. I attempted to make this program as short as possible, and to use as little RAM as possible. That's why I used a variant record to change a long integer into two short integers and reused the integer values in the last two statements. Normally I'm against shortcuts at the expense of readability, but in this case, size was the most important thing.

```
program setclock;
```

```
const day_mask = $1F;
```

```
default_date = $0B74;
```

```
default_time = $0;
```

```
type date_xfer = record case boolean of
```

R E V I E W S

```
TRUE : (hi_int : short_integer; lo_int :
short_integer);
```

```
FALSE : (lint : long_integer);
```

```
end: (record)
```

```
var kyb_date_time : date_xfer;
```

```
function gettime : long_integer;
```

```
  XBIOS(23);
```

```
function tsetdate(d : short_integer) :
short_integer;
```

```
  GEMDOS($2B);
```

```
function tsettime(t : short_integer) : short_in-
teger;
```

```
  GEMDOS($2D);
```

```
begin (setclock)
```

```
  kyb_date_time.lint := gettime;
```

```
  if (kyb_date_time.hi_int & day_mask) = 0
then
```

```
    begin (invalid date)
```

```
      kyb_date_time.hi_int := default_date;
```

```
      kyb_date_time.lo_int := default_time;
```

```
    end: (invalid date)
```

```
      kyb_date_time.hi_int := tset-
date(kyb_date_time.hi_int);
```

```
      kyb_date_time.lo_int := tset-
time(kyb_date_time.lo_int);
```

```
end. (setclock)
```



Interlink

by INTERSECT SOFTWARE

ST review by Gary Hilbert

This late entry into the telecommunications/modem program market may have tough sledding competing with established "standards" except for its extreme ease of use and almost limitless present (and expansion) capabilities. This program seems ideal for a new modem owner since it is entirely GEM based and very intuitive in use. The GEM features do not get in the way and keyboard fanatics can access most of the frequently used features via function keys, alt-key combos, and/or mouse button presses. The program authors run a support BBS and are also very active on GENie. The program receives frequent minor updates which can be obtained by returning your original disk with \$5.00. I believe the latest version is 1.80. You want to ensure you get at least version 1.75 to ensure ability to load various terminal emulators as described below. The program is not copy protected so you can move it to a double sided disk or a hard disk as you prefer. INTERLINK ST has ALL the usual features you've used or heard about, so in this review I will concentrate on the unusual extra goodies.

EXTRA BIG GOODIE #1: you can upload and download files "in the background"

This feature allows you initiate the sending or receiving of a file (in xmodem or ymodem) and then return to INTERLINK. You can use the mini-word processor in INTERLINK's buffer to load in and review/modify text files. I often will scroll through the message base of a BBS at max speed, then while uploading or downloading a file, I go back and read the messages. Although I

**Ask not what your club can
do for you, but what you can
do for your club.**

R E V I E W S

Commodore. Over the next few years they produced a number of innovative high quality software titles for the 8-bit including **M.U.L.E.**, **Pinball Construction Set**, **Music Construction Set**, and **Archon**. Then suddenly, they stopped making Atari programs. Due to popular demand, they released more Atari software, however most of these new releases were not up to EA's old standards. **Racing Destruction Set** is awkward and buggy, **Mail Order Monsters** is slow and dull, and **Age of Adventure** is just a re-release of two older games. One title that they did make good is **Lords of Conquest**. **Lords of Conquest** is a 1 to 4 player game where the players must try to dominate the world by owning the most cities. When the game starts a map is selected, each map is made up of 20-48 small territories, the computer spreads resources among the territories, these resources include Gold, Iron, Pastures (for horse breeding), Coal, and Timber. The players then divide the land up among themselves. The play of the game is divided up into Development, Production, Trade, Shipment, and Attack phases, any one of these phases except for attack can be cancelled for reasons such as Civil Wars, Astounding Prophecies, or Widespread Insanity. In the Development phase, the players can build boats, weapons, or cities with the resources they have. What you can build depends on what resources you produced or traded in the previous round. In the Production phase, the Resources you own produce the goods used in the production, everything except horses are added to the stockpile, the horses are placed somewhere on the map and are valuable for both offense and defense. The Trade phase only appears if there are three or four players, it's just what the name implies. The shipment phase allows you to move a weapon, horse or boat, or the stockpile to a new location. In the

Attack phase, the player selects an enemy territory to attack, and is given odds of winning, he/she can then try to add boats, horses and weapons to attempt to better the odds. If there is a third party bordering either the attacker or defender, that player can select whether he will help the attacker, help the defender, or remain neutral. At this point the attacker can decide to go on with the attack, try to attack something else, or exit the attack phase without attacking. The game ends when someone gets the preselected number of cities, or if two or more people get enough cities to win, the person who ends up with the most. One of the nice features of this game are that it only takes one joystick, so that, unlike **M.U.L.E.**, you can play a four player game on an XL or XE. Some more features are the map editor, the computers ability to create random maps, and the solo mode against the computer. There are just a few minor flaws, one is that in the one player mode, the computer sometimes takes a long time to plot its moves (especially when it's not fairing so well). Also there should be an option to win by total conquest instead of obtaining a certain number of cities, because all too often if one person feels threatened by a military build-up of an opponent, he/she can put all his resources into cities and end the game early. Overall, this is a very good multi-player game. It was well thought out, and executed. And with its \$14.95 retail price, a real bargain. This one's well worth it!

Lords of Conquest

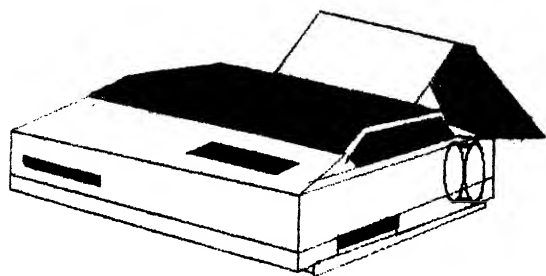
Electronic Arts

1820 Gateway Drive

San Mateo, CA 94404

\$14.95

REVIEWS



Star NX-1000

Review by Tony Smolar

Star Micronics Co. Has been a maker of popular printers for years, and their latest, the NX-1000 Multi-Font Printer should be just as popular as its predecessors. The NX-1000 is designed to emulate the Epson LX-800 and the IBM Proprinter I, which means it's already compatible with a large selection of 8-bit and ST Software, and at 120cps Draft Mode, it can get large printing projects done in a relatively short time. As for features, the NX-1000 offers A friction and tractor feed, a sheet feeder for single sheets, and it also has an extensive control panel allowing a few of its many typestyles to be selected. One of the biggest draws of the printer is that it has four Near Letter Quality (NLQ) Typestyles built in (Courier, SanSerif, and two Orator styles). If these aren't enough, more can be downloaded to the printer. Any of these styles can be used in Pica, Elite, or Condensed modes, with Proportional spacing, Double-Strike and/or Italics, plus several other features. The print quality is good as long as the paper is feeding properly. As far as graphics go the NX-1000 has seven graphics modes ranging from 60dpi on up to 240dpi. The manual is fairly extensive and gives help on most of the printer commands. It even includes a type-in Microsoft BASIC program for defining and downloading fonts to the printer. I only have

a two complaints about the printer. The first is that the DIP switches don't seem to function properly all the time, for instance, I turned off the Buffer to download fonts, but after I switched the switch back to the on position the buffer still seems to be Off. The Second is (Ok, so I'm being a little picky here) that the parallel interface is on the far side of the printer from the ST (Both have it on the Right Side), and my cable is too short to reach it there so I had to set it up backwards. Overall, the printer is an excellent value for the money. Most Mail order places sold it for \$169-\$179 at the time I purchased it.

Star NX-1000

Star Micronics America Inc.

Pan Am Bldg., Suite 3510

200 Park Avenue

New York, NY 10166

J & S Computers
(215) 966-4464

Atari

1040ST Color-----	\$859
1040ST Mono-----	715
130XE-----	149
1050 Disk Drive-----	135
1027 Printer-----	125

Printers

Interface-----	35
Epson LX86-----	269
Epson Fx86e-----	429
EPson FX286e-----	619
Epson LQ800-----	549
Epson LQ1000-----	799
Epson EX800-----	529
Epson EX1000-----	759

Modems

Atari XM 301-----	31
Avatex 1200hc-----	135

R E V I E W S

haven't tried it, you are also able to run properly written GEM programs from INTERLINK without disturbing the file transfer. As of October 1987, the author claims to have tested successfully; First Word, Word Writer, Superbase, and states that most GEM programs with a menu bar should also work.

GOODIE#2: you can add new terminal emulations and file transfer protocols.

The programs basic mode is a VT52, however you can add new terminal emulations as they become available. So far the author has made an ANSI emulator available (for downloading from GENie) and has a VT100 almost ready. They accept suggestions from users and will create additional emulators most often requested by users. The program has ASCII, Xmodem, and Ymodem built-in. The background file transfer noted above is the first add-in transfer protocol provided; again others will be released in the future. This expansion feature ensures that your favorite modem program will not become outdated as popular services and BBS's switch to future new file transfer protocols or terminal emulators.

GOODIE #3: built-in mini BBS.

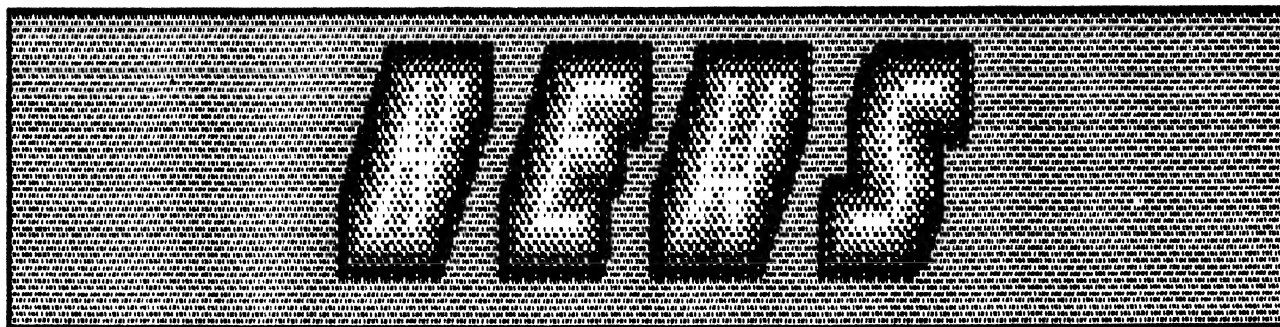
This is called remote answer mode and allows you to set up three levels of security which can restrict the caller to low--leave messages and up or down load to a specified folder on your disk. Medium--allows access to everything except "file delete" and "message read." High--full access including the built-in TOS/disk functions. The callers access level is determined by the password they supply when calling.

GOODIE #4: macro recording.

Macro's can be created by "recording" your keystrokes into a named macro file. It

will watch & record every step you take manually and be available later for immediate playback, timed playback (such as 3:00am etc) or playback upon startup of INTERLINK. Other features include: an on-line help screen, 20 entry auto dialer (unlimited extra dialer files can be loaded in from disk), auto logon feature (can respond to as many as 8 questions the called BBS asks), disk commands, ASCII translation table, 20 user defined alt- and cntrl- function keys combo, 40 line screen with monochrome monitors, and an optional on-screen one-line type ahead buffer. The data capture buffer utilizes GEM features and includes a mini-word processor as well as a (save to/read from) "Clipboard" feature (the clipboard is a standard for exchanging data from program to program using a hidden file on your hard or floppy disk. This standard was developed by Russ Wetmore and adopted by Atari on 11/86). The buffer size is set by the user and may be as large as memory allows. The buffer editor allows marking a block (it changes color) for the usual block functions; delete, move, copy, save, and print block. You may set up to four position markers in the buffer text which you can later jump to. There is a find command, but no search & replace. In summary, this is an excellent modem program and is in fact one of the most enjoyable GEM programs I have ever used. Everything seems to happen in an obvious and intuitive way. I paid \$35 for it at Gemini and feel it was money wisely invested.

*This space was for your
article, but, we never got it!
Please try to be more prompt
next time.*



Compiled by Tony Smolar

BBS Express! Professional

Orion Micro Systems recently released a new version of BBS Express for the 8-bit. The New Version, Called BBS Express! PRO, is designed for serious BBSs since it requires SpartaDos 3.2x or Higher, and recommends a Ram Disk or Hard Disk because all commands are external and require speed in loading so as not to keep the users waiting. Some of the many features of this program are 300-9600 baud, up to 32 message bases, ability to trace replies, up to 516,128 download files, File descriptions for all downloads, Xmodem, CRC, and Ymodem, 320 security flags, and up to 32 surveys. The program requires an Atari 8-bit with 64K or more, and SpartaDos 3.2x. A Hard Disk or large Ramdisk is recommended. The Price is \$49.95 and it's available from Orion Micro Systems, 2211 Planters Row Drive, Midlothian, VA 23113. This Information comes from Keith Ledbetter, the author. Via the R.I.ACE Reporter 3/30/88

Publishing Partner Professional

While on the Topic of "professional" software, Soft-Logik Corporation has released Publishing Partner Professional. This program has over a hundred features the the old version didn't have. Some of these features include: Easy text flow around graphics. Importation of 1st Word and Word Perfect Files UNDO Command Rotation of text or graphics Plus Much more. Publishing Partner Professional is for the ST series and costs \$199.95. If you upgrade from the old version, it costs \$100. For more information contact Soft-Logik Publishing Corp. 11131 S. Towne Sq., Suite F, St. Louis, MO. 63123. This Information comes from Soft-Logik Review, Soft-Logik's Official Newsletter

Timeworks Desktop Publisher

The Timeworks Desktop Publisher is also now available. For more information, see Ralph Fenner's review elsewhere in this issue.

XE Game System

According to a report in Compute! Magazine, Atari claims to have sold over 2,000,000 XE Game Systems over the Christmas Season. If this report is accurate, then it means a greatly increased 8-bit base and should mean more software development.

ST Xformer II

Soon to be released as Shareware is the second version of the 8-bit emulator for the

ST. This new version is supposed to be twice as fast as the old one, offer Apple II, Atari 800, and Commodore 64 emulation, and Player/Missile and Sprite graphics. The release date is July 1, 1988. Watch for it. This information comes from Darek Mihocka, the programmer, Via The R.I.ACE Reporter 3/30/88

FCC Surcharge

The Federal Communications Commission has dropped its plan to add surcharges for users of commercial information services. The Charges, which would have been up to \$5.50 extra per hour, were dropped because of protests from users and commercial services plus pressure from Congress. It is reported that the Agency received over a ten thousand letters opposing the charges, which is a record for telephone issues

Electronic Arts

Lastly, Electronic Arts has started an upgrade program for people who have moved from an 8-bit Apple I, Atari or Commodore 64 to a 16-bit computer. The cost for the upgrade is half the price of the program and right now there are few programs that are in both the 8-bit Atari and ST formats.

Ammendments

As per the authority granted under the Constitution of ABE's ACEs Article 3.7 and 3.8 the Executive Committee passed the following Amendment on 5/14/88.

ABE's ACEs Constitution Amendment

For the purpose of allowing high school seniors to serve non critical Executive Committee positions. 7.2.2 Exception and Clarification to 7.2 Only for the non critical positions of Membership Secretary, Editor,

and Chief Librarian. Persons nominated/ elected may be younger than eighteen (18) years of age at the time of nominations/ elections but must turn eighteen (18) before their elected term would expire (see section 7.1.1). All actions/duties preformed by these minors must be approved by the Executive Committee until they turn eighteen (18) years of age. All other Executive Committee positions must be filled by members that are of the current legal adult age at the time of the election (Eighteen at the time of this amendment).

Amendment (Proposed) 3.9 All Executive Committee members that complete at least nine (9) months of service will receive credit that may be redeemed for an individual membership renewal.

Classifieds

Wanted

Printer or modem interface for 8 bit. Call (215)-432-7273 and ask for Tony.

For Sale

Avatex 1200 HC modem. Hayes Compat., 1200 baud. Call (215)-797-5865 and ask for Pat.

If you have a classified, call Tony Smolar or Joe Souder. Their numbers are on the back cover.



President's Column

by John Slaby

For the first time in more than three years the election for the E-board will actually be an election. We have more than one person running for three of the positions. This willingness to interact I hope spills over into the meetings. We still need people to demo "anything". If everyone in the club demoed one item we would have enough demos for more than three years! Think about it. It really isn't that hard and you don't have to make a "Star Wars" presentation. Demo something you enjoy doing with the computer. You can even videotape your presentation at home, the club does have a VHS player and we can probably even dig up a BETA. The E-board is more than willing to provide support and needed equipment just contact any of them. Another item that has been started at the last

three meetings and I hope will continue is having both a 8 and 16 bit system setup and after each meeting people are encouraged to come up and use the equipment. Sort of a miniSig. We have had some success with this concept and several people have come up at each meeting. This is a good opportunity for some of you 8 bit members to play with an ST. This is also an excellent opportunity for you to bring in anything you may be having trouble with and get help or show off an interesting programming method you developed or are working on which may not be suitable for a general meeting presentation. This is your chance to interact with other club members. Please use this resource after all this interaction is what the heart of a user group really is.

The April meeting was held in Penn Hall due to a booking of a large number of Girl Scouts for most of the meeting areas at NCACC. At the meeting we auctioned off nonused and dead club equipment. We also had demos of the Creative Process from the Catalog, PartyWare from HiTech Expressions, and Qwik Pix PC from White Lion Software. The meeting did run longer than normal due to the auction and nominations for E-board.

The May meeting was back at the cafeteria and we had a demo of some of the programs on the May ANALOG and both 8 and 16 bit versions of Chestmaster 2000 from The Software Toolworks (Electronic Arts). We raffled off both versions of Chestmaster. After the demo several members helped the 8 and 16 bit battle on equal levels. The result was a stalemate at 29 moves. At the ST miniSig we also had a good demo of Dr T's midi software.

The cafeteria has been booked for meetings on 6/11, 7/9, and 8/13/88. Hopefully by the June meeting we will be confirmed for every second Saturday through December. Our annual election and flea market meeting will be held in June. Future meeting details will have to wait for the new E-board but I'm sure they will be



Treasurer's Report

by John Slaby

March through May 1988

Income Items

50/50	\$12.00
Auction	\$255.30
Disk Sales	\$283.00
Membership	\$615.00
Raffle	\$52.00
Total	\$1217.30

Expense Items

Club BBS	\$56.83
Hotline	\$14.00
Library	\$6.59
Meeting Hall	\$600.00
Newletter Postage	\$29.70
Newsletter	\$469.61
PO Box Fee	\$36.00
Treasurer	\$13.38
Total	\$1226.11

Miscellaneous Articles



This month I had to write this column at the last minute, and the only two hints I could come up with in that short notice were ST hints. I'm sorry that I was unable to have any 8-bit hints this month and I will try to always include them in the future.

NEOCHROME ANIMATION: Did you know that Neochrome has an animation feature? Well it does. How do you use it? That's not so obvious. First click on the Grabber Icon, then move the mouse into the box on the right side of the screen where the word "Grabber" appears, click the mouse on the center of the last 'R', it may take several tries to do this, but when you get it right, a movie camera icon should appear in one of the icon boxes on the left of the screen. There isn't too much written

on how to use it, so you will probably have to experiment with it to see how it works.

EPSON TYPE PRINTERS: If you have an Epson or Epson Compatible printer, you may have noticed that without the Install Printer Accessory Installed, you only get about 2/3 of the screen printed when you do a screen dump. A simple solution is when the Install Printer Accessory is loaded, click to 960 dots/line and then save the desktop info. Everytime you boot that disk from now on, the graphics will be set for Epson Printers.

Turbo Basic Tutorial

by Tony Smolar

Graphic Routines for
the Turbo Basic Programmer

Turbo Basic is a fast and powerful public domain BASIC interpreter and compiler for 64K Atari XL/XEs. Because it is fully compatible with Atari BASIC, BASIC programs can be loaded and RUN with greatly increased speed. But to get the real speed and power out of it, special Turbo BASIC commands can often be used to replace several lines of BASIC programming.

Picture this...

The most popular format for storing uncompressed pictures is the Micropainter format. This format, which is used by Micropainter, Rambrant, Atari Artist, as well as several PD graphic programs, can easily be added to Turbo BASIC programs. Try the following listing:

```
10 GRAPHICS 15+16
20 OPEN #1.4.0."filename.ext"
30 BGET #1.DPEEK(88),7680
40 GET #1.A:POKE 712.A :BGET #1,708,3
```

50 CLOSE #1

Lines 10-20 set up the graphics screen and opens the disk file. At line 20 the BGET command is used to load the 7,680 graphic bytes starting at the beginning of screen memory which is determined by DPEEK(88). Line 40 gets the color data and puts it in the appropriate registers and line 50 closes the file. To load B/Graph files, line 10 should be changed to GRAPHICS 8+16 and line 40 should be omitted. There, wasn't that simple?

One step up...

One thing that is difficult to achieve in Atari BASIC is fast vertical motion of Player/Missile graphic shapes. In TB the MOVE command can be used to make a P/M shape move up, and -MOVE to move down. (Using MOVE to move a byte down, or -MOVE to move a byte up will cause the shape to erase itself). Try this:

```
10 POKE 106,176:GRAPHICS 8
20 POKE 559,62:POKE 623,1
30 POKE 704,28:POKE 53248,100
40 POKE 53256,0:POKE 53277,3
60 POKE 54279,176:Y=39
70 FOR T=0 TO 4 71 READ A:POKE 46120+T,A
72 NEXT T
100 FOR Y=39 TO 139
110 -MOVE 46080+Y,46080+Y+1,6
115 POKE 53248,PEEK(20):NEXT Y
130 FOR Y=140 TO 40 STEP -1
140 MOVE 46080+Y+1,46080+Y,6
145 POKE 53248,PEEK(20)
150 NEXT Y:GOTO 100
1000 DATA 153,189,255,189,153
```

In this demo, Line 10 sets aside P/M Memory at Location 44032 and sets the screen to Graphic mode 8. Lines 20-60 set up memory locations required for P/M graphics (See Various Magazine Articles and books for more details). Lines 70-72 read the P/M data from line 1000 and poke it into P/M Memory. Lines 100-115 move the shape down 100 lines, and lines 130-150 moves it

back up and loops back to line 100 where it will go down again. This continues on and on as a sort of a yo-yo effect.

Special F/X

Turbo BASIC has several extra graphic commands among its 70+ new commands. One of these is the CIRCLE command, which for the first time, allows circles to be drawn quickly. This command can be used as the basis for some interesting special effects. Try this Demo:

```
10 GRAPHICS 8+16:POKE 710,0
```

```
20 COLOR 1
```

```
30 FOR T=0 TO 100
```

```
40 CIRCLE 159.95,T
```

```
50 NEXT T
```

It is easy to see how this might be used in a space game to show a planet approaching, or maybe a ball being thrown. I hope this article has shown you some of the things that can be done with Turbo BASIC with a little clever programming, and/or given you some ideas or inspiration for special effects in your own programs. If you come up with any interesting ones, submit them with a little write-up for the rest of us to see.

Do It Yourself Keyboard Repair

Do-It-Yourself Atari 8 bit Keyboard Repair

by John Nagy

Reprinted from the Michigan Atari Magazine

Atari's 8 bit computers have one of the best service records in the computer industry. One single area comes up time and again as the weak point on our computer: the keyboard. Nearly all the original 800's (the beige tank) are still working flawlessly, but when the XL series came out, the retail price was a quarter of the introductory 800 price. Part of the saving came as a result of a much cheaper keyboard, although it still wasn't bad. Then came the XE

series, priced at under a quarter of the original XL prices, and again, the keyboard was cheapened drastically. Here are a number of solutions that have been used with great success by owners around the country. Some are gleaned by my own experience inside of too many keyboards, and others come by way of user group newsletters.

The 400/800

These machines will probably never stop working. Almost a joke among users, the 400 "membrane" keyboard is hideous to type on and was widely replaced by after-market keyboards. These are too varied in nature to try to discuss here. The keyboard on the 800 is full typewriter quality, and seldom needs attention. When it does, it is very difficult to repair due to the many moving parts inside each key. Sometimes the keys will stick...probably due to too many Cokes and peanut butter. Since the unit is very well-built and has no thin film connectors, it is safe to nearly drench this machine in "tuner cleaner" spray to get the glop out. Use no-residue cleaner at first, followed with a low-lubrication spray. I have had the nastiest-feeling keys go silky smooth after a session of this. If you actually break a key (almost the only other common failure), you have little choice but an entire keyboard transplant. Check around, a dead 800 isn't too hard to find for parts and the replacement is straightforward...even though opening the 800 is quite an experience! Replacement 800 keyboards are generally not available new and would be prohibitively expensive.

The XL Series

Generally, a fairly stable keyboard, although there are actually at least three distinctly different key sets used throughout production and yours may not exactly match the descriptions here. Some are very nice (the one on the 1200XL is legendary) and will never need work. Others are not so lucky. These keyboards are incorporating printed-film conductors that can be damaged by some cleaners and rough handling, so beware. The Atari XL keyboard and console keys are attached to the top of the case. To get at it, remove the screws from the bottom of the case (don't lose too many when turning it over!) and lift the top away. It remains tethered with a ribbon connector and sometimes a

grounding wire. Leave the ribbon connected until it is necessary to remove it. It is simply pressed into a socket on the motherboard and will deteriorate every time you pull it out. Problem: One key repeats uncontrollably. This is the most common flaw and can be thermally dependent, happening only when cold or only after use. The repair is simple after examination of the internals of the keyboard. Pull the ribbon and get the keyboard alone on a good work-surface, keys down. Remove the metal backplate carefully, keeping those tiny phillips screws. Once the back is loose, be even more careful not to let any keysprings get lost. They will stay put without popping, one in each key, if you don't dump the whole keyboard. Maybe you'd better put the cat in another room. You will be looking at a plastic sandwich of two conductive-trace layers and a punched plastic insulator between them. The idea is that the keyspring presses down on the top layer and squeezes the top conductor through the hole onto the lower layer, making the connection. After a few jillion keypresses, the top layer stretches and touches the lower all the time, or at least when you don't want it to. Many times, simply pulling the layers apart, gently cleaning them, and reassembling the unit will result in complete recovery, as the sheets will be sitting in a slightly new orientation. More severe cases may require some shimming (use ordinary tape, cut into thin strips) to thicken the "swiss cheese" insulator around the problem keys. Problem: One or a group of keys (including the "console" keys, Start, Select, and Option) no longer work. This can be simply too much junk in between the layers of the plastic, and fixed by cleaning. It is more likely (especially if a group of keys are affected) either a break in the conductive traces or a bad connection at the ribbon. It's worth the effort to try to clean it first, using the procedures above. The ribbon end is very fragile. Some older units have a thick metal trace glued onto a small plastic tab that pushes into the connector, and these almost always fall apart upon the disconnection. They also are usually the original problem. To fix one, remove the tab and clean the now hanging "fingers" of the ribbon. They bend easily!!! so watch it. When you have them looking good, spray out any junk in the connector, and try this trick to reinsert the ribbon: fold the ends of the conductors individually back up against the

ribbon, facing the side that will best contact the connector on the motherboard. Gently press the ribbon back into the connector, trying to see that the fingers on the ribbon stay straight and don't touch each other. You can jockey them a bit with a toothpick after the ribbon is connected. Beware, you may only get to do this a couple times before you lose a conductor. If you do, you can try to bare the ribbon back a-ways, but more likely you are finished with that keyboard. Newer keyboards have the conductor printed on the plastic. These can develop broken traces where a piece of the conductor either wears off or is flaked off, losing the connection. These may be hard to find, but careful inspection and testing with an Ohm meter for conductivity in the problem area will show where the circuit is interrupted. The area of actual contact between the sheets can also be worn too badly to conduct. Either way, repair it with conductive paint. This can be found at Radio Shack or other electronic parts stores, or use rear window defroster repair from auto-supply houses. Using a toothpick as a brush, bridge the problem area with fresh and stirred conductive paint and allow to dry. Test it again before you reassemble, and be careful not to create new traces where there were none before! Although more stable than the older-type ribbon, the printed ones can go bad at the end too. A small scratch can prevent the connector from making contact with a trace, or the connector may be losing it's grip. Either way, fix it by trimming a quarter-inch off the ribbon to bring virgin traces into the connector, and shim the backside (non-conductive) of the ribbon with an adhesive paper label. The new contact area coupled with the tighter fit will insure a connection. As with the 800, if you actually break a keytop, you may have to replace the keyboard. Fortunately it is easy, following the instructions above, and used "parts" machines are plentiful. Feel free to mix parts from two bad keyboards, using the information above - you can't lose anything and can probably get one to work.

The XE Machines

The weakest keyboard yet, this one goes much further in cheap production procedures. It has no springs to loose and no sandwich. It uses a conductive pad on each key that simply touches a pair of traces on a single sheet to make the

any and all of the film-trace and ribbon end fixes described above for the XL to effect your key repairs. Do NOT use any cleaner of any kind on the film, a soft damp cloth is all you should wipe with. Many cleaners would wipe the traces right off! Problem: The Start, Select, and Option (console) keys are dead or erratic. This is the biggest problem reported on the XE series, and does not relate to any defect described above. Each key amounts to a switch, and the type used in the XE have some internal resistance that the circuitry expects and deals with. But, due to poor planning, the amount of resistance in the console keys is too critically close to the tolerance point of the circuit watching them, resulting in failure if the resistance is a bit high. Cleaning may seem to fix this, but never for long. Don't. The fix is not in the keyboard itself. Atari put several comments in service reports about how to fix this problem by replacing a resistor and adding a ship behind the film in the console key area in order to enable a more firm keypress. I have tried these methods repeatedly without reliable result. However, a fix that has never let me down is to add shunt resistors under the motherboard. Essentially, you simply add a resistor in each console key circuit that continually "leaks" a bit to the ground, so that not nearly as much of a connection is needed at the key itself. Obtain three 3,000 Ohm resistors, the smaller the wattage and physical size, the better. Remove the keyboard and set it aside. Remove the main circuit board from the case and remove the shields (usually bend-tabs holding the top to the bottom through slots in the circuit board). Seen from the top (as though you were looking at the keyboard), the ribbon connector has ground as the first connection at the left end and reset at the other end. Moving in from the Reset end is Option, Select, and Start, in that order from right to left. Working from under the circuit board, so as not to damage the terribly cheap connector, solder one end of all three resistors to the ground pin and the other end of each to the pin for each of the three console keys. Be careful not to use too much heat or solder as the motherboard is fragile, and the traces are delicate. Bend the resistors and tape if need be to assure no shorts when the shields go back on. Try the repair out by using this simple BASIC program: 10 ? PEEK(53279):G.10 Type that line, then type RUN. You will see a row of sevens down the screen. Pressing any one or combina-

tion of console keys should reliably result in the value changing to any number from 0 to 6. If it is well, your console keys work with the original feather touch instead of the heavy jab you might have had to use before the fix. Like the other series machines, if you actually break off a key you must replace the keyboard. But if you can repair the plastic film inside the XE keyboard there is a replacement sheet available that is superior to the original. Contact BEST Electronics, 2021 The Alameda Suite 290, San Jose, California 95126. You can call them at 408-243-6950 for current pricing, but it is under \$30.

If you have an article to submit, upload it to the BBS, send it in the mail, or give it to Tony Smolar or Joe Souder at the meetings.

Advertising Rates

1/4 Page	\$15
1/2 Page	\$25
Full Page	\$40

Next Issue:

Error Messages

ABEs ACEs

Allentown Bethlehem Easton's Atari Computer Enthusiasts is an independent user group organized and run by owners of Atari Computers. Atari is a trademark of Atari Corp.; all references should be so noted.

If you would like more information about ABE's ACEs, write us at the club's address or call the club HOTLINE at the number listed on this page.

This newsletter is published by ABE's ACEs on a bi-monthly basis (six issues per year). Opinions expressed in this newsletter are those of the author and not ABE's ACEs. All unsigned articles should be attributed to the Editor. This newsletter is provided free to our membership and on an exchange basis to other user groups. Original articles from our newsletter may be reprinted in other newsletters, provided credit be given to both author and source.

Submissions to the newsletter may be made via the club's BBS, via mail, or at the general meetings.

Club Numbers

Help Key II BBS:

Direct Line—(215) 759-2683

Call Forwarding—(215) 821-9222

Hotline (Voice)—(215) 799-2228

E-board

President—

Vice-President—Leon Bonam
(215) 266-1521

Secretary—Brain Oplinger

Treasurer—John Slaby
(215) 252-1991

Membership—Jace Gill
(215) 395-1676

Librarian—Chris Andrews
(215) 866-2459

Newsletter Editor—Ralph Fenner
(215) 868-6459

Library Staff

Paper Library—Greg Lukow

8-Bit Master Disks—Charles Derk

8-Bit Disk Duplication—John Douglas

16-Bit Disks—Chris Andrews

Newsletter

16-Bit Editor—Joe Souder (215) 253-4466

8-Bit Editor—Tony Smolar (215) 432-7273

ABE'S ACEs

P.O. Box 2830

Lehigh Valley, PA 18001

First Class Mail

